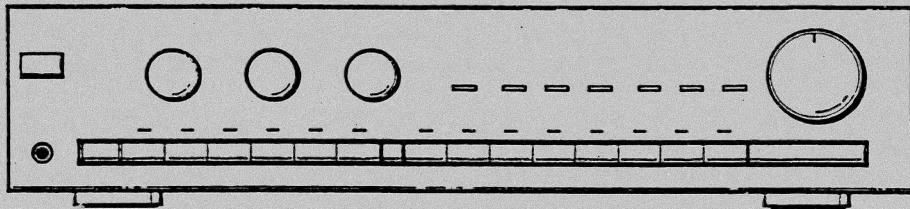


# **UHER**

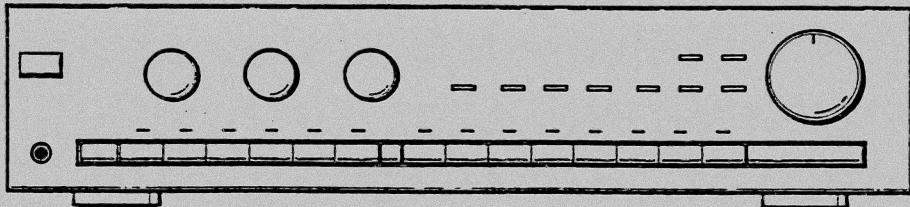
## **SERVICE MANUAL**

### **UPA - 200 / 400 STEREO PRE AMPLIFIER**

**UPA-200**



**UPA-400**



# SPECIFICATIONS

## Amplifier Section

Continuous Max. Output Voltage is 8 Volts Per Channel,  
Min., at 47 Kohms from 20Hz to 20kHz with no more than  
0.015% totalharmonic distortion.

- Input(Sensitivity / Impedance)  
Phono 1 (MM) ..... 2.5mV / 47KΩ  
Phono 2 (MC) ..... 0.2mV / 100 Ω  
Tuner, Aux / Video, CD, Tape 1,2 Play 150mV / 47KΩ
- Phono 1 Overload Level(T.H.D,0.1%, 1kHz)  
..... 150mV
- Output(Level / Impedance)  
LINE OUT 1,2 ..... 1V / 150 Ω  
Tape 1,2 Rec ..... 150mV / 1.5KΩ
- Frequency Response  
Phono 1,2(RIAA Equalization)  
..... 20Hz to 20kHz ± 1.0dB  
Tuner,Aux / Video,CD,Tape1,2 Play  
..... 10Hz to 70kHz ± 3dB
- Tone Control  
Bass(100Hz) ..... ± 10dB  
Treble(10kHz) ..... ± 10dB
- Loudness Control(Volume Control set at -40dB Position) ..... + 7dB(100Hz), + 4dB(10kHz)
- Subsonic Filter (20Hz) ..... -3.5dB
- High Filter (8kHz) ..... -3.5dB
- Muting(For UPA-400) ..... -20dB
- Hum & Noise(IHF, Short-Circuited, A Network)  
PHONO 1(5mV Input, IV Output) ..... 89dB  
Tuner,Aux,CD,Tape1,2 Play(500mV Input, IV Output)  
..... 97dB

## Miscellaneous

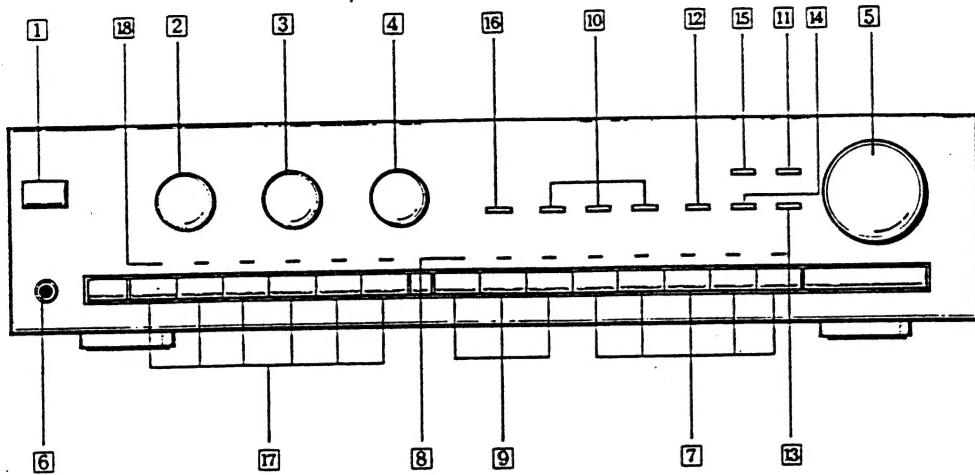
Power Requirements ..... AC220V,50Hz  
Power Consumption ..... 30W  
Dimensions ..... 420(W) X 88(H) X 300(D)mm  
Weight(without package) ..... 5kg

## Furnished Parts

Operating Instructions ..... 1  
Connection Cord with PIN PLUG ..... 1

NOTE : Specifications and design subject to possible modifications without notice due to improvements.

## FRONT PANEL FEATURES



### 1. POWER SWITCH

Press to On position to turn on the pre-amplifier. Upon power up, a muting circuit presents a short delay in order to suppress the sometimes annoying sound present at switch-on.

### 2.3. BASS AND TREBLE CONTROLS

Use these controls to adjust the bass and the treble. If you turn the bass control clockwise from its center position, you will be able to emphasize the sound in the low-frequency range. Conversely, turning the bass control counter clockwise from the center position, you will attenuate the sound.

Use the treble control to adjust the sound in the high-frequency range in the same manner.

### 4. BALANCE CONTROL

Use this control to balance the volume of the left and right channels.

### 5. VOLUME CONTROL

Use this control to adjust the output level to the speakers and headphones. Turn it clockwise to increase the output level. No sound will be heard if you set it to "0".

### 6. HEADPHONE JACK

Plug the headphones into this jack when you want to listen through your stereo headphones.

Be sure to turn down the volume level before plugging in the headphones. Turn up the volume level to a comfortable listening level once the headphones are adjusted.

### 7. FUNCTION SELECTOR

Use this selector to select the program source. When set, the function indicator above the panel corresponding to the position of the function selector will light up.

CD : Select when you wish to listen to a Compact Disc Player.

AUX/VIDEO : Select when listening to a program source which is connected to the AUX/VIDEO jacks.

TUNER : Select when listening to radio broadcasts from the tuner.

PHONO 1(MM) : Select when playing records on a turntable with a moving magnet(MM) cartridge.

PHONO 2(MC) : Select when playing records on a turntable with a moving coil(MC) cartridge.

### 8. FUNCTION INDICATORS

The CD, AUX/VIDEO, TUNER, PHONO 1,2 function indicators light up in accordance with the position of the function selector.

### 9. TAPE MONITOR SWITCH

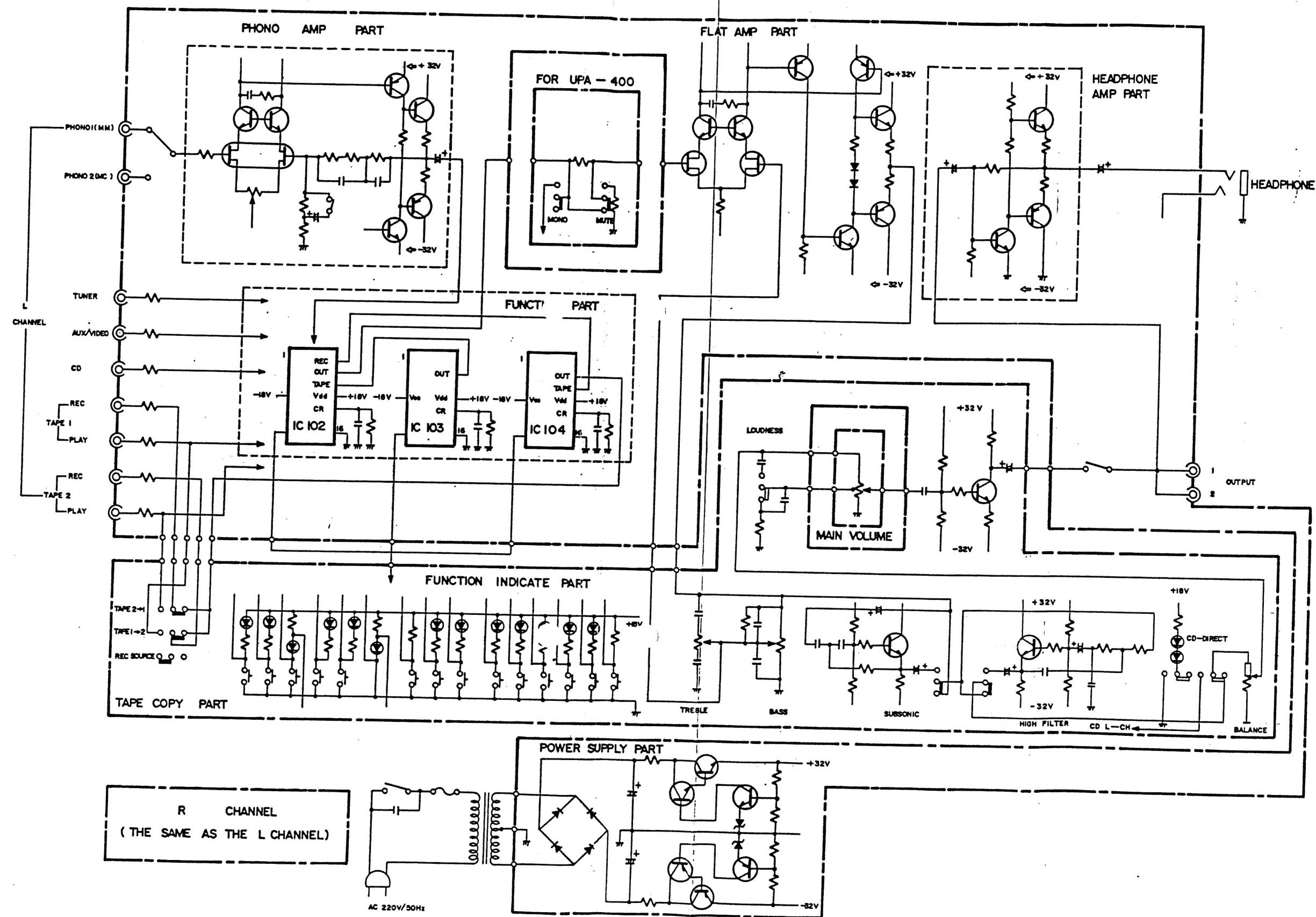
Use these buttons to select the program source which is being reproduced.

DAT / TAPE 1 : Select to monitor a recording or a tape being played back on the tape deck which is connected to the TAPE 1 jacks.

TAPE 2 : Select to monitor a recording or a tape being played back on the tape deck which is connected to the TAPE 2 jacks.

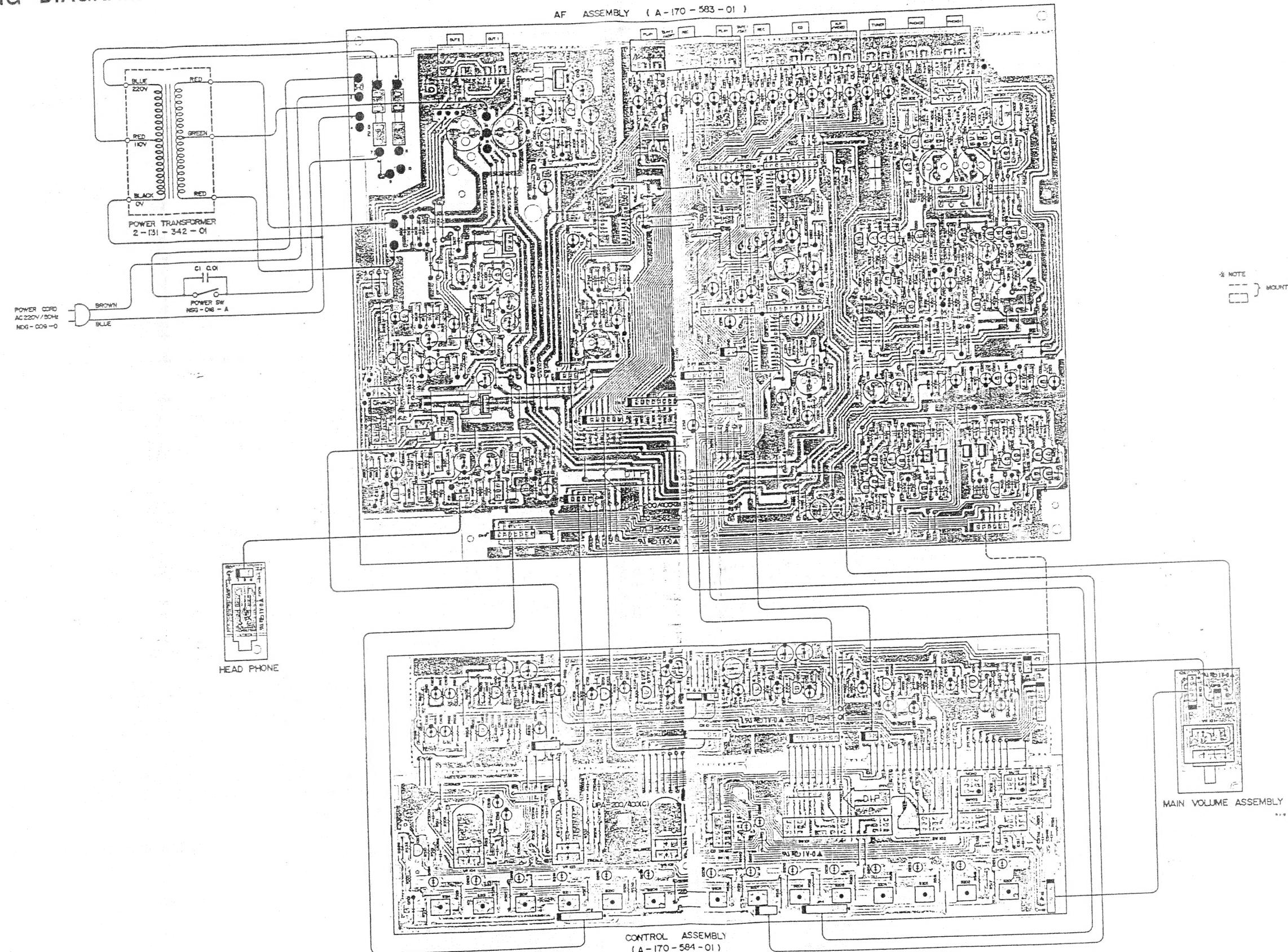
OFF : Select whenever you are not playing back a tape or monitoring a recording.

## BLOCK DIAGRAM



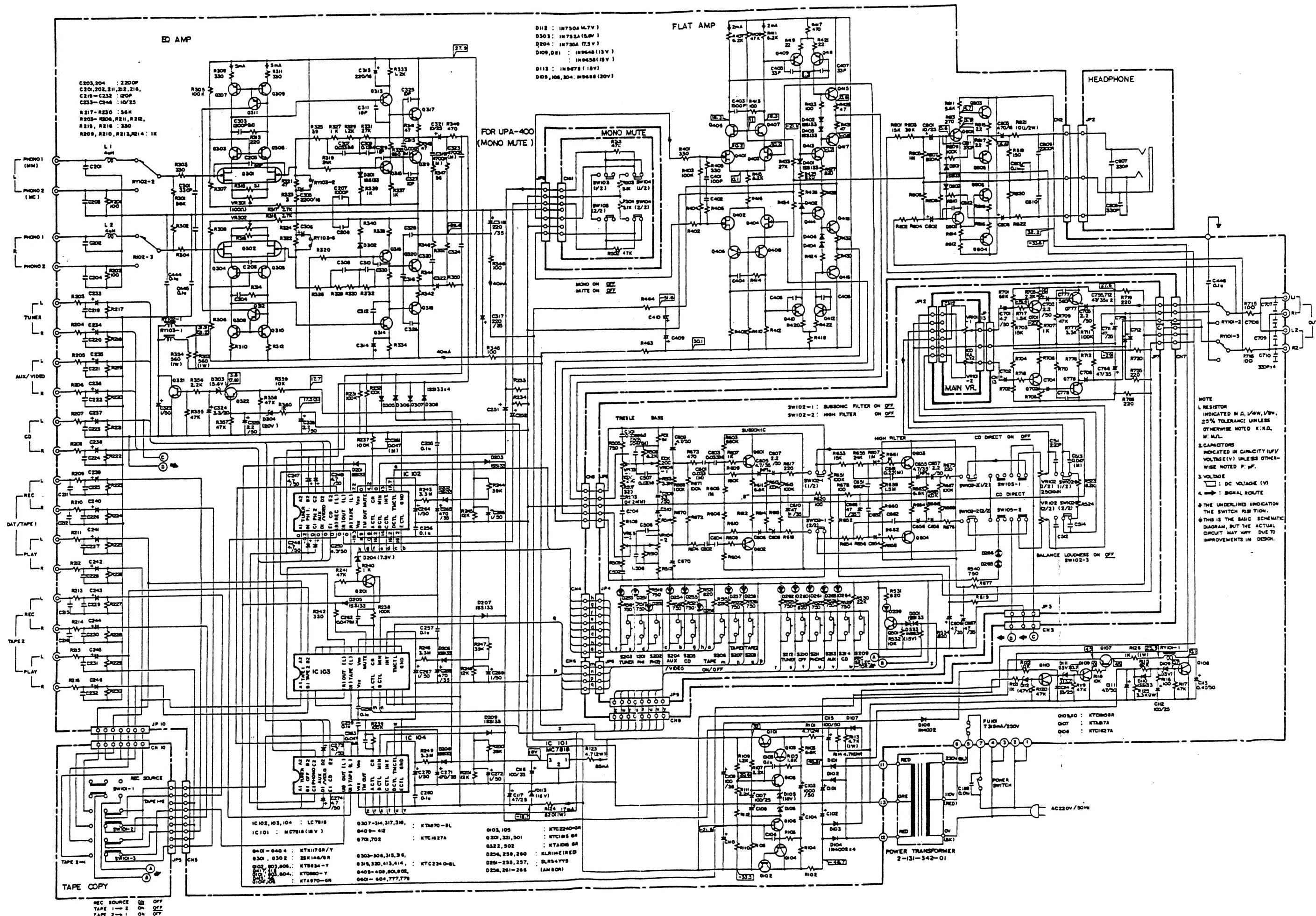
# WIRING DIAGRAM

AF ASSEMBLY ( A - 170 - 583 - 01 )

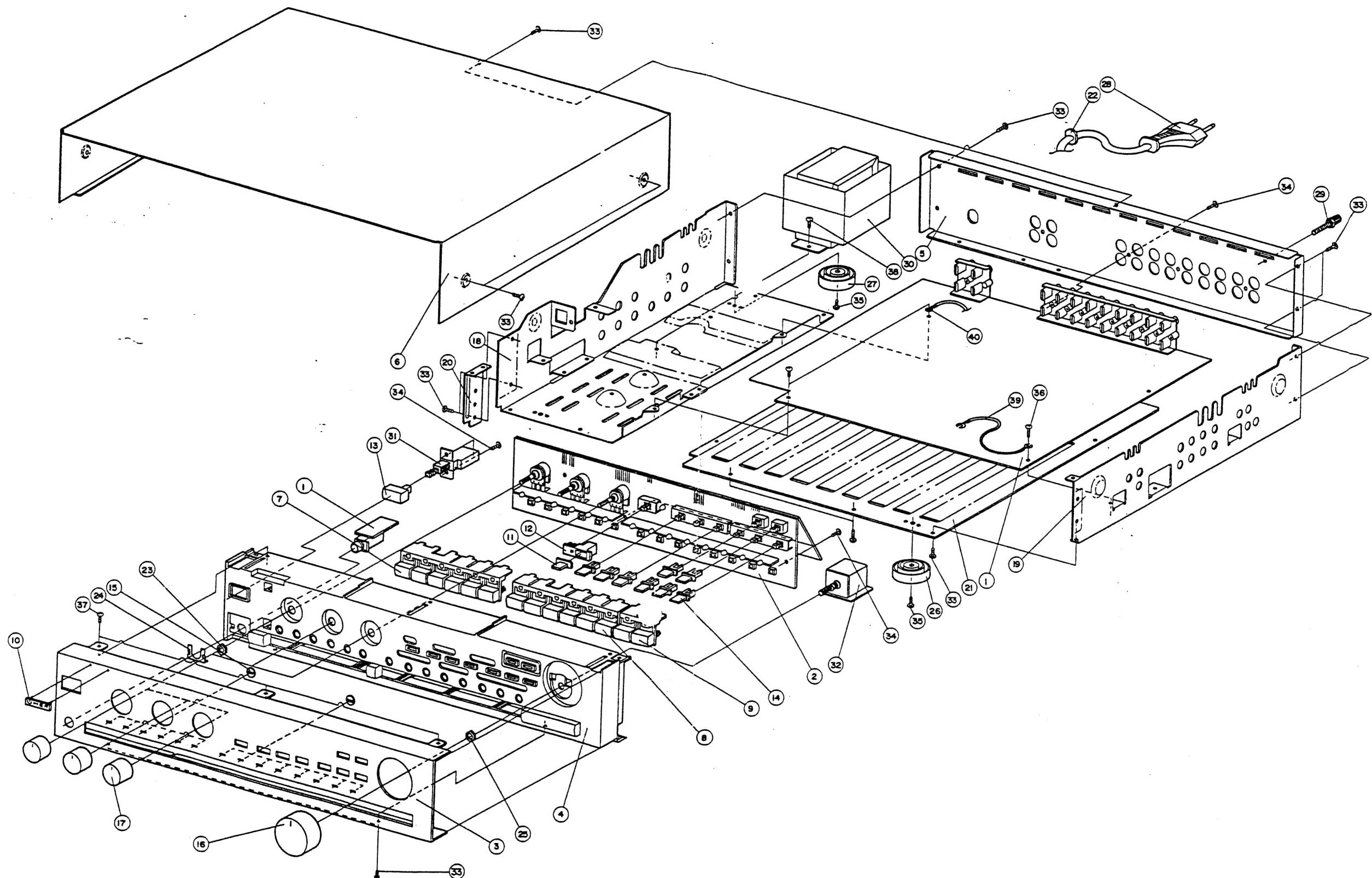


CONTROL ASSEMBLY  
( A - 170 - 584 - 01 )

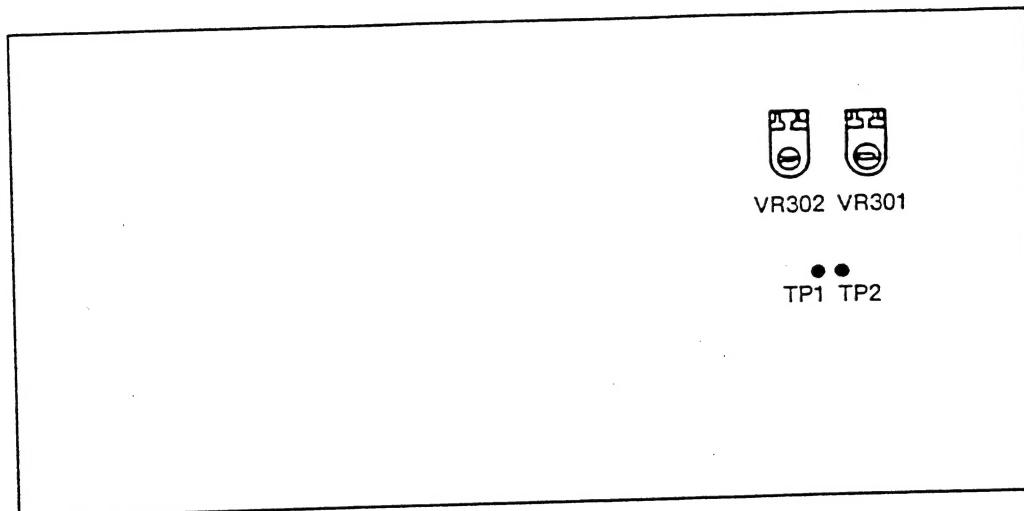
# SCHEMATIC DIAGRAM



## EXPLODED VIEW



## ADJUSTMENT



	Adjusting Point	Measuring Point	Adjusting Value
1	VR301	TP 2	DC OV ± 0.3V
2	VR302	TP 1	DC OV ± .3V